IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

As a named inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

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the spe	cification of which (check one)							
[X]	is attached hereto.								
[]	was filed on	as Un	ited States Application						
	Number or PCT In	nternational Applica	tion No						
	and was amended	on	(if applicable).						
incl udi	I hereby state that ng the claims, as am	I have reviewed and ended by any amend	l understand the contents of the abo dment referred to above.	ve-ider	ntified s	speci	ficati	ion,	
filing capplication for paticountry any for	including for continulate of the prior application. I hereby claim forcent or inventor's cert or other than the Unit	nation-in-part applic ication and the nation eign priority benefit ificate, or 365(a) of ted States of Americ patent or inventor's	Commation which is material to patent actions, material information which conal or PCT international filing date as under 35 U.S.C. 119(a)-(d) or 365 any PCT international application of the certificate, or of any PCT international certificate, or of any PCT international in certificate.	became of the (b) of which d	e availa continany for lesignation, by	ble l uatio eign ted a	n-in- appli t leas	een the part ication i	on(s)
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I herel	oy claim the benefit	under 35 U.S.C. §11	19(e) of any United States provision	al appl	ication	(s) li	sted	belov	v.
(Appli	cation Number)		(Filing Date)						12,000
(Appli	cation Number)	<u> </u>	(Filing Date)						

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information known by me to be material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

60/299,244	June 19, 2001	Pending
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
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(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
As a named inventor, Hamilton, Brook, Smith & R Customer No. 21005,	I hereby appoint the attorneys Reynolds, P.C., Two Militia D	and/or agents associated with rive, Lexington, Massachusetts 02421-4799
and		,
to prosecute this application a	nd to transact all business in th	e Patent and Trademark Office connected therewith.
Please send corresponden	ace to:	
[X] Customer No.	21005 HAMILTON, BROOK	z, SMITH & REYNOLDS, P.C.
or	Two Militia Drive Lexington, MA 02421	4799
or [] Address as follows:	-	-4799
[] Address as follows:	-	.4799 Telephone No.: 781-861-6240
[] Address as follows: Direct telephone call	Lexington, MA 02421-	
Direct telephone called Direct facsimiles to: I hereby declare that on information and belief are that willful false statements as	Lexington, MA 02421- s to: James M. Smith, Esq. James M. Smith, Esq. all statements made herein of believed to be true; and further the like so made are punishal States Code and that such will	Telephone No.: 781-861-6240
Direct telephone calls Direct facsimiles to: I hereby declare that on information and belief are that willful false statements at 1001 of Title 18 of the United	Lexington, MA 02421- s to: James M. Smith, Esq. James M. Smith, Esq. all statements made herein of believed to be true; and further the like so made are punishal States Code and that such will	Telephone No.: 781-861-6240 Facsimile No.: 781-861-9540 my own knowledge are true and that all statements made that these statements were made with the knowledge able by fine or imprisonment, or both, under Section
Direct telephone called Direct facsimiles to: I hereby declare that on information and belief are that willful false statements at 1001 of Title 18 of the United application or any patent issue. Full name of sole	Lexington, MA 02421- s to: James M. Smith, Esq. James M. Smith, Esq. all statements made herein of believed to be true; and further the like so made are punishal States Code and that such will	Telephone No.: 781-861-6240 Facsimile No.: 781-861-9540 my own knowledge are true and that all statements made a that these statements were made with the knowledge able by fine or imprisonment, or both, under Section lful false statements may jeopardize the validity of the
Direct telephone called Direct facsimiles to: I hereby declare that on information and belief are that willful false statements at 1001 of Title 18 of the United application or any patent issue. Full name of sole	Lexington, MA 02421- s to: James M. Smith, Esq. James M. Smith, Esq. all statements made herein of believed to be true; and further of the like so made are punished States Code and that such will ed thereon.	Telephone No.: 781-861-6240 Facsimile No.: 781-861-9540 my own knowledge are true and that all statements made that these statements were made with the knowledge able by fine or imprisonment, or both, under Section
Direct telephone calls Direct facsimiles to: I hereby declare that on information and belief are that willful false statements at 1001 of Title 18 of the United application or any patent issue. Full name of sole or first inventor	Lexington, MA 02421- s to: James M. Smith, Esq. James M. Smith, Esq. all statements made herein of believed to be true; and further and the like so made are punished States Code and that such will ed thereon. ffrey P. Grossman Fulkerson Street	Telephone No.: 781-861-6240 Facsimile No.: 781-861-9540 my own knowledge are true and that all statements made a that these statements were made with the knowledge able by fine or imprisonment, or both, under Section lful false statements may jeopardize the validity of the Date 10/29/01
Direct telephone calls Direct facsimiles to: I hereby declare that on information and belief are that willful false statements at 1001 of Title 18 of the United application or any patent issue. Full name of sole or first inventor	Lexington, MA 02421- s to: James M. Smith, Esq. James M. Smith, Esq. all statements made herein of believed to be true; and further of the like so made are punishal States Code and that such will ed thereon.	Telephone No.: 781-861-6240 Facsimile No.: 781-861-9540 my own knowledge are true and that all statements made a that these statements were made with the knowledge able by fine or imprisonment, or both, under Section lful false statements may jeopardize the validity of the Date 10/29/01

Full name of second joint		
inventor, if any	Thomas F. Knight, Jr.	
Inventor's Signature		Date
Residence	58 Douglas Road	
	Belmont, Massachusetts 02378	
Citizenship	USA	
Mailing Address	Same as above.	
Full name of third joint		
inventor, if any	Jeremy H. Brown	
Inventor's Signature		Date
Residence	73 Newbury Street, #2	
	Somerville, Massachusetts 02144	
Citizenship	USA	
Mailing Address	Same as above.	
Full name of fourth joint		
inventor, if any	Andrew W. Huang	
Inventor's Signature		Date
Residence	85 Pearl Street, B	
	Cambridge, Massachusetts 02139	
Citizenship	USA	
Mailing Address	Same as above.	

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STATEMENT CLAIMING SMALL ENTITY STATUS (37 CFR 1.27(a))-NONPROFIT ORGANIZATION

DOCKET NUMBER: 0050.2025-001

	or Patentee:	Jefficy P. Grassman, Thom	as F. Knight, Jr., Jeremy H. Brown and Andrew W. Huane
Filed or Is	ssued:		Cost of Forwarding Pointer Aliasing
Title:	·	Mechanisin to Reduce the t	Cost of Forwarding Pointer Aliasing
-	NAME OF NO ADDRESS OF	NPROFIT ÓRGANIZATION NONPROFIT ORGANIZATIO	Massachusetts Institute of Technology S. Combridge Center - Kendull Square Cambridge, MA 02142
TAPEON	NONPROPE	ORGANIZATION:	
r y I	TAX EXE I NONPRO (NAME C	EMPT UNDER INTERNAL RE DFIT SCIENTIFIC OR EDUCA DF STATE	ON OF HIGHER EDUCATION EVENUE SERVICE CODE (26 U.S.C.501(a) and 501(c)(3)) TIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA
] 	WOULD	QUALIFY AS TAX EXEMPT	UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3)) IF OF AMERICA CIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED IN THE LINITED STATES OF AMERICA Lifted above qualifies as a nonprofit organization as defined in 37 CFR 1.27(a)(3) for
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status pr	ior to paying, or	e duty to file, in this application r at the time of paying, the earlie . (37 CFR 1.27(g)(2))	or patent, notification of any change in status resulting in loss of entitlement to small entity est of the issue fee or any maintenance fee due after the date on which status as a small entity
NAME	OF PERSON SI	GNING	Rita Pilipowicz
taltet	N ORGANIZA	TION OF PERSON SIGNING	Patent Administrator
ADDRE	SS OF PERSO	n signing	77 Massachusetts Avenue, Cambridge, MA 02139
SIGNA	TURE	The of File	DATE 11/13/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

As a named inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

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I here	by claim the benefit	under 35 U.S.C. §11	9(e) of any United States provision	nal appl	ication	(s) li	sted l	below	⁷ .
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I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information known by me to be material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

60/299,244		June 19, 2001	Pending
(Application Serial No.)		(Filing date)	(Status: patented, pending, abandoned)
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(Application Serial No.)		(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	<u> </u>	(Filing date)	(Status: patented, pending, abandoned)
As a named inv Hamilton, Brook, Smit Customer No. 2100 and	th & Reynold	oy appoint the attorney. ls, P.C., Two Militia I	s and/or agents associated with Orive, Lexington, Massachusetts 02421-4799
to prosecute this applica	ation and to tra	ansact all business in tl	ne Patent and Trademark Office connected therewith.
Please send corresp	ondence to:		
[X] Customer No.	H T	wo Militia Drive	K, SMITH & REYNOLDS, P.C.
or	L	exington, MA 02421	-4799
[] Address as foll	lows:		
[] Address as foll	lows:		
		ames M. Smith, Esq.	Telephone No.: 781-861-6240
Direct telephor	ne calls to: <u>J</u>	ames M. Smith, Esq.	Telephone No.: 781-861-6240 Facsimile No.: 781-861-9540
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Full name of second joint			
inventor, if any	Thomas F. Knight Jr.)	/	
Inventor's Signature	Hours - hy V	/	Date
Residence	58 Douglas Road		·
	Belmont, Massachusetts 02378		
Citizenship	USA		
Mailing Address	Same as above.		
Full name of third joint			
inventor, if any	Jeremy H. Brown		
Inventor's Signature	in H Dan		Date 9 27/0\
Residence	73 Newbury Street, #2-	9 Valentino	ή×.
	Somerville, Massachusetts 02144.	Cambrilae	MA 02/39
Citizenship	USA		
Mailing Address	Same as above.		
Full name of fourth joint	Ş.		
inventor, if any	Andrew W. Huang		
Inventor's Signature			Date _ 9 /27/0].
Residence	85 Pearl Street, B		
	Cambridge, Massachusetts 02139		
Citizenship	USA		
Mailing Address	Same as above.		
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